

what is claimed is:

1. A method of detecting suspected anomalous shadows,  
comprising the steps of

obtaining a difference image representing the difference  
5 between two images, which have been obtained of the same subject  
at different photographing times, by subjecting said two images  
to an interimage process to obtain the difference between said  
two images,

obtaining a processed difference image by subjecting the  
10 obtained difference image to an image process wherein the actual  
difference between the two images on which said difference image  
is based is enhanced relative to the artifacts appearing due  
to misalignment of the positions of the structuring elements  
thereof, and

15 detecting the actual difference between the  
aforementioned two images from the processed difference image  
as suspected anomalous shadows.

2. A method of detecting suspected anomalous shadows as  
defined in claim 1, wherein

20 the image process is an image process that suppresses the  
artifacts more than the actual difference between the two images  
on which the difference image is based.

3. A method of detecting suspected anomalous shadows as  
defined in claim 2, wherein

25 the image process for suppressing the artifacts relative  
to the actual difference between the two images is a process

based on a morphology process employing structuring elements that are larger than the artifacts while smaller than the actual difference.

4. A method of detecting suspected anomalous shadows as  
5 defined in claim 1, wherein

the image process is an image process that enhances the actual difference more than the artifacts.

5. A method of detecting suspected anomalous shadows as defined in any of claims 1, 2, 3, or 4, wherein

10 the interimage process is a subtraction process in which the structural positions of the two images are correlated and a subtraction process is performed therebetween.

6. A method of detecting suspected anomalous shadows as defined in any of claims 1, 2, 3, or 4, wherein

15 the two images upon which the difference image is based are radiation images that have been obtained of the same subject in a temporal series, each of said images having been obtained at a different time, and which become the objects of a comparison to determine temporal change.

20 7. A method of detecting suspected anomalous shadows as defined in any of claims 1, 2, 3, or 4, wherein

the substantially round-shaped differences from among the actual differences appearing in the processed difference image are detected as the suspected anomalous shadows.

25 8. An apparatus for detecting suspected anomalous shadows, comprising

an interimage processing means for obtaining a difference image representing the difference between two images, which have been obtained of the same subject at different photographing times, by subjecting said two images to an interimage process  
5 to obtain the difference between said two images,

an image processing means for obtaining a processed difference image by subjecting said difference image to an image process wherein the actual difference between the two images on which said difference image is based is enhanced relative  
10 to the artifacts appearing due to misalignment of the positions of the structural elements thereof, and

a detecting means for detecting the actual difference between the aforementioned two images from the processed difference image as suspected anomalous shadows.

9. An apparatus for detecting suspected anomalous shadows as defined in claim 8, wherein

the image processing means is a means for carrying out a process which suppresses the artifacts more than the actual difference between the two images.

10. An apparatus for detecting suspected anomalous shadows as defined in claim 9, wherein

as a means for carrying out the process which suppresses the artifacts more than the actual difference between the two images, the image processing means performs a process based on  
25 a morphology process employing structuring elements that are larger than the artifacts while smaller than the actual

difference.

11. An apparatus for detecting suspected anomalous shadows as defined in claim 8, wherein

the image processing means is a means for carrying out  
5 a process which enhances the actual difference between two images relative to the artifacts.

12. An apparatus for detecting suspected anomalous shadows as defined in any of claims 8, 9, 10, or 11, wherein

the interimage process is a subtraction process in which  
10 the structural positions of the two images are correlated and a subtraction process is performed therebetween.

13. An apparatus for detecting suspected anomalous shadows as defined in any of claims 8, 9, 10, or 11, wherein

the two images upon which the interimage image is based  
15 are radiation images that have been obtained of the same subject in a temporal series, each of said images having been obtained at a different time, and which become the objects of a comparison to determine temporal change.

14. An apparatus for detecting suspected anomalous shadows  
20 as defined in any of claims 8, 9, 10, or 11, wherein

the detecting means is a means for detecting the substantially round-shaped differences from among the actual differences appearing in the processed difference image as the suspected anomalous shadows.

25